Applicant: Denison Community School District – NW Region

Email address:

djohnson@denisoncsd.org

Name of Individual Submitting Application:

Darin Johnson

Executive Summary

In 500 words or less, summarize the school district's, non-public school system's or accredited, stand-alone non-public school's vision for your Computer Science is Elementary initiative.

Technology is undoubtedly changing the way we live, work, and teach. We have witnessed this first-hand as we toured two STEM workspaces in the Okoboji and Spencer Community School Districts. We also visited a progressive brand management company called Bluespace Creative near our school. These experiences, particularly the one at Bluespace Creative, have encouraged us to reevaluate our existing computer lab and curriculum. Clearly, changes are necessary in order to better meet the needs of our students who will be joining a workforce that values creativity and flexibility as much (or more) as fixed sets of skills.

The Denison Elementary School's vision is to transform the existing computer lab environment into a flexible workspace where all students are inspired to communicate, collaborate, create, and think critically to solve complex problems using computer science. In order to accomplish this, we need to transform our current technology curriculum, which is dominated by skills-based lessons that focus on email, drawing, and presentation software. Our vision is to transform this curriculum into one which gives students a firm foundation in essential skills but also emphasizes more advanced computer science skills such as logic and reasoning, computer programming, and robotics in a setting where the students solve open-ended problems.

In addition to the curriculum, there are two significant obstacles in creating the desired student workspace: First, the tables are arranged in immovable rows. Second, the students use aging desktop computers whose hard drives are beginning to fail. Our goal is to provide our students with a work environment that utilizes more flexible seating arrangements and portable devices that accommodate a variety of different instructional needs. These needs range anywhere from robotics, which would require a more open floor plan, to computer programming and debugging code, which would benefit from having clusters of tables where all students can collaborate and share ideas. With a K - 3 Technology Instructor already in place, the workspace activities would reach all K - 3 students during 40-minute educational technology classes on a six-day rotation. When these classes are not using the workspace, it will be open for teachers and students to use the devices and equipment for lessons that integrate computer science and other technology concepts. Additionally, the PK - 5 Technology Integrationist would assist teachers with incorporating these concepts in core subject areas in their own classrooms.

The goal for this initiative is to create a learning environment that prepares our young students for careers that will undoubtedly require more advanced computer science skills and flexible thinking than our current setting and curriculum can provide. We welcome the opportunity to 1) Align our curriculum using the Iowa Computer Science Standards and Iowa Core Curriculum (21st Century Skills, Universal Constructs, and Career Exploration); 2) Remodel our computer lab into a more engaging and inspiring workspace; and 3) Collaborate with community business partners to ensure our curriculum and workspace are preparing our learners to become productive members of a technology-dominated workforce.

Demographics

Points Awarded: / 10

10 points

What is the name of the district, system or stand-alone non-public school making the application?
The school district applying for this grant is the Denison Community School District.

What is the name of elementary school(s) that will participate in Computer Science is Elementary?
Denison Elementary is the building that would be participating in the grant.

What grades does the participant building(s) serve?
Denison Elementary serves Preschool through Third Grade.

Provide the name, email address and phone number of the primary lead for the application.
Darin Johnson
38 North 20th Street
Denison, Iowa 51442
(712) 263 - 3104
djohnson@denisoncsd.org

Provide the name, email address and phone number of the fiscal agent or business manager who will handle reimbursement if awarded.
Scott Larson
819 North 16th Street
Denison, Iowa 51442
(712) 263 - 2176
slarson@denisoncsd.org

In what STEM region is the district/system/stand-alone non-public school located? (https://iowastem.gov/regions)

Northwest STEM Region

Based on Student Reporting in Iowa (SRI) Oct. 1, 2018, reporting, what percentage of students in the participating elementary school(s) are eligible for free and reduced-price lunch?

Based on SRI Oct. 1, 2018, reporting, 71% of students attending the Denison Elementary school are eligible for free and reduced-price lunches.

Based on SRI Oct. 1, 2018, reporting, what percentage of students in participating elementary school(s) are underrepresented populations in the field of computer science (African-American, Hispanic, American Indian/Alaskan, Native Hawaiian/Pacific Islander)?

Denison Elementary also has 72% of students who are from underrepresented populations that include Asian, African American, Indian American, and Hispanic.

Goals and Measurements

Points Awarded: / 20

20 points

What are the measurable goals for the Computer Science is Elementary initiative in the district/system/stand-alone non-public school?

The three primary goals for our initiative include:

1) Provide all K - 3 students a strong foundation in computer science concepts and opportunities to apply those skills in complex, open-ended problems that require communication, collaboration, critical thinking, and creativity. The educational technology curriculum will be aligned to the Iowa Computer Science Standards and Iowa Core Curriculum.

2) Increase student engagement and achievement by analyzing implementation walk and student survey data.

3) Remodel the existing computer lab in order to provide a space that engages all students with the tools and flexible seating arrangements they will need to solve these complex problems.

How do these goals tie to the larger district/system/stand-alone non-public school goals, mission, and vision?

1) This initiative supports the district's goal to ensure learning for all students through Core Instruction because it includes a plan to revise and align our computer science curriculum with the Iowa Computer Science Standards and Iowa Core Curriculum.

2) This initiative supports the district's goal to sustain a Teacher Leadership Committee (TLC) that improves instructional practices, collaboration, and student engagement/achievement.

3) This initiative supports the district's goal to increase and enhance 21st Century Learning Opportunities because the updated curriculum and environment will provide more opportunities for students to solve complex problems using technology.

How will the district/system/stand-alone non-public school measure the success of the plan using student data, with an emphasis on achievement and engagement?

The success of our initiative will be measured in the following ways:

1) Implement engagement surveys to gauge the impact of the revised curriculum. Student engagement is a strong indicator of achievement, so the Technology Instructor and Integrationist will conduct the surveys each quarter.

2) Analyze data from the district TLC's implementation walks to reveal the impact of this initiative on instruction, engagement, and SAMR alignment.

3) Analyze data from the Clarity Technology Survey to understand the impact of this initiative on instruction.

4) Analyze assessment data after the transition to a curriculum emphasizing more advanced computer science concepts and problem solving.

Plan

Points Awarded: / 40

40 points

Describe how the plan will be launched or built upon an existing computer science education in the proposed participating elementary school(s).

Our plan begins with an extensive five-part review of our current computer science curriculum:

1) Retain some components that will facilitate a more creative workspace, such as an introduction to computer hardware/software and networks.

2) Expand some components, such as computer programming (coding).

3) Introduce other activities, such as robotics, circuitry, and Makerspaces.

4) Transition some skills, such as Digital Citizenship and Google Apps for Education (GAFE) to regular classrooms where they can be addressed by teachers in a more timely and relevant manner.

5) Form a cohort of teachers willing to implement computer science skills in the core subject areas, then expand this group to include the entire teaching staff.

Impact

Sub-Section Points Awarded: / 10

What is the plan for computer science instruction by July 1, 2020?

By July 1, 2020, our plan is to highlight a different aspect of computer science each quarter of the K - 3 educational technology classes:

1) Quarter 1: Computer Fundamentals (hardware, software, and networks)

2) Quarter 2: Computer Programming

3) Quarter 3: Robotics

4) Quarter 4: Makerspace Environment (computer chips, circuitry, and video production)

These four aspects will remain consistent across all four grade levels, but they will increase in complexity as the students transition from one grade to the next. We acknowledge the fact that there is a great deal of overlap between concepts. For example, students' ability to write and debug code will be essential in programming robots. We also realize that some concepts will require more or less time to develop than expected. Therefore, the four quarters will not be fixed units of time and can be adjusted as needed to meet the needs of the students.

This initiative will impact learners beyond the new workspace. The Technology Instructor and Integrationist will establish a cohort group of classroom teachers that represent each grade level. The purpose of this cohort is to provide classroom teachers with the opportunity to experience first-hand how the new activities and devices can be used in the core subject areas. As this group grows, our goal is to increase the amount of time that our students are being exposed to a high-quality curriculum based on computer science strategies that are integrated into all core instruction areas.

When the Technology Instructor is not teaching educational technology classes, the workspace will be open for other classes to use. Because the devices and other equipment are portable, they can also be moved to meet the needs of students in regular classrooms. The Technology Integrationist is another resource for teachers who are transforming their units to incorporate computer science skills.

Does the plan build on existing computer science instruction or launch a first-time initiative?
Our plan builds on existing computer science instruction, but it includes components that will be expanded or included for the first time.

Will computer science be integrated into other subjects or delivered as a stand-alone discipline?
Educational research shows that isolated teaching of disciplines like math, language arts, social studies, and science is inefficient and less effective than teaching across disciplines. In the workforce, employees rarely focus on one discipline or skill at a time. Therefore, our plan is to integrate computer science into the other subject areas as much as possible. Part of our team's professional development time will be devoted to exploring ways to accomplish this. For example, the Next Generation Science Standards (NGSS) and the newly developed Iowa Core Curriculum Social Studies Standards provide excellent opportunities for computer science integration at the initial stages of unit design.

Some components of Makerspaces, such as green screen technology, can transform traditional methods of social studies and science instruction. Another example is the integration of the patterning inherent in computer programming with existing math and language lessons. The Technology Instructor, the Technology Integrationist, and the cohort group of classroom teachers will work with grade level teams as they develop and revise units to discover meaningful ways to integrate other computer science concepts.

What grade level(s) of students and teachers will be included initially?
Initially, the K - 3 Technology Instructor will be exposing all students in Kindergarten through Third Grade to computer science instruction for 40 minutes every 6 days. This will be expanded over time with the cohort group of teachers and eventually to the entire building.

What is the plan for expansion to all students in all grades in your school?
In the next two years, the Technology Instructor and the Technology Integrationist will provide Professional Development sessions that will inform the teaching staff about computer science concepts and provide time to explore ways to implement them in their own classrooms. Later, our goal will be to meet with grade level teams to formalize an implementation plan for classroom integration.

The experience that we gain at Denison Elementary will be used to guide the design of a similar computer science initiative at Broadway Elementary which serves fourth and fifth graders. As students progress into middle school and high school, our goal will be to continue growing the cohort

group and curriculum to meet the needs of our students as they become more technology literate. The district-wide technology staff meets several times a year to ensure continuity in computer science across all grade levels for all students. The insights and experience gained through this initiative will help lay the groundwork for similar changes in curriculum throughout the district.

Curriculum

Sub-Section Points Awarded: / 10

What is the plan to identify, revise or write high-quality computer science curriculum aligned to the Iowa Computer Science Standards, 21st Century Skills, Universal Constructs and career exploration?

In the summer of 2019, the Technology Instructor and Integrationist plan will develop the first quarter's curriculum with a focus on Computer Science fundamentals. This will provide time to build lessons based on the Iowa Computer Science Standards and Iowa Core Curriculum (21st Century Skills, Universal Constructs, and Career Exploration).

Our plan includes having a Professional Development day once every quarter throughout the 2019 - 2020 school year. These days will provide opportunities to review and reflect on previous lessons while looking ahead to our robotics lessons that will be taught in the third quarter of school. Another part of the curriculum will be based on Project Lead the Way's (PLTW) Launch materials that are designed for K - 5 students. This will allow the new K - 3 curriculum to be fully integrated into the district's existing PLTW initiative which includes five existing courses, two at the Middle School and three at the High School.

Data from quarterly pre- and post- student engagement surveys will help the Technology Instructor and Technology Integrationist make adjustments in the curriculum to better meet the students' instructional needs.

In the following school year (2020-2021), we will utilize the same amount of days to focus on developing lessons for computer programming for the second quarter and Makerspace activities for the fourth quarter. We will also use this time to incorporate career exploration opportunities with input from the business partners.

Professional Learning

Sub-Section Points Awarded: / 10

What is the plan for professional learning in years one (fiscal year 2020) and two (fiscal year 2021), including participants, providers, timeline, instructional pedagogy, curriculum connections, alignment to Iowa standards and school community/employer partner connections?

The activities for FY 19 are listed to demonstrate the inspiration behind this initiative.
FY 19

ITEC Conference
a) Timeline: 10/18
b) Provider: ITEC Presenters
c) Participants: K - 3 Instr., 4 - 5 Instr., PK - 5 Integrationist, Dist. Technologist

Site Visit to Okoboji Elem.
a) 11/18
b) JoAnne Sackett

c) K - 3 Instr., 4 - 5 Instr., PK - 5 Integrationist, Dist. Technologist

Site Visit to Lincoln Elem.
a) 11/18
b) Torrey Proctor
c) K - 3 Instr., 4 - 5 Instr., PK - 5 Integrationist, Dist. Technologist

Site Visit to Bluespace Creative
a) 12/18
b) Scott Winey, Director
c) K - 3 Instr., 4 - 5 Instr., PK - 5 Integrationist, Dist. Technologist

FY 20

Curriculum Revision & Development
a) Timeline: 8/19, 9/19, 11/19, 1/20, 3/20, 5/20
b) Provider: Heather Langenfeld, Dir. of Elem. School Improvement
c) Participants: K - 3 Instr., PK - 5 Integrationist
d) Emphasis: Pedagogy, Curriculum, Standards

PD
a) 10/19, 12/19, 2/20, 4/20
b) K - 3 Instr., PK - 5 Integrationist
c) Cohort Group Representatives
d) Pedagogy, Curriculum, Standards

Follow-up Meetings with Bluespace Creative
a) Fall 2019
b) Scott Winey, Director
c) K - 3 Instr., PK - 5 Integrationist, Dist. Technologist
d) Community/Employer Partner Connections

Site Visit to Loess Hills Elementary School, Sioux City Iowa
a) Fall 2019
b) STEM Coord.
c) K - 3 Instr., 4 - 5 Instr., PK - 5 Integrationist, Dist. Technologist
d) Pedagogy and Curriculum

ITEC Conference
a) 10/19
b) ITEC Presenters
c) K - 3 Instr., 4 - 5 Instr., PK - 5 Integrationist, Dist. Technologist
d) Pedagogy, Curriculum, Standards

Clarity Survey/Community Employer Surveys
a) 9/21
b) Brightbytes/Business Partner Surveys
c) Business Partners, K - 3 Instr., PK - 5 Integrationist, Dist. Technologist
d) Pedagogy, Curriculum, Standards

Iowa 1:1 Institute
a) 4/20
b) Iowa 1:1 Presenters
c) K - 3 Instr., PK - 5 Integrationist
d) Pedagogy, Curriculum, Standards

Preliminary Community/Employer Surveys
a) 10/20
b) Business Partner Surveys
c) Business Partners, K - 3 Instr., PK - 5 Integrationist
d) Community/Employer Partner Connections, Curriculum

Project Lead the Way Professional Development
a) TBD
b) Project Lead the Way
c) K - 3 Instr., PK - 5 Integrationist
d) Curriculum

FY 21

Curriculum Revision & Development
a) Timeline: 8/20, 9/20, 11/20, 1/21, 3/21, 5/21
b) Provider: Heather Langenfeld, Dir. of Elem. School Improvement
c) Participants: K - 3 Instr., PK - 5 Integrationist
d) Emphasis: Pedagogy, Curriculum, Standards

PD
a) 10/20, 12/20, 2/21, 4/21
b) K - 3 Instructor, PK - 5 Integrationist
c) Cohort Group and Classroom Teachers
d) Pedagogy, Curriculum, Standards

Follow-up Meetings with Bluespace Creative
a) 9/20
b) Scott Winey, Director
c) K - 3 Instr., PK - 5 Integrationist, Dist. Technologist
d) Community/Employer Partner Connections

Site Visit, Location TBD
a) 9/20
b) STEM Coord.
c) K - 3 Instr., 4 - 5 Instr., PK - 5 Integrationist, Dist. Technologist
d) Pedagogy and Curriculum

ITEC Conference
a) 10/20

b) ITEC Presenters
c) K - 3 Instr., 4 - 5 Instr., PK - 5 Integrationist, Dist. Technologist
d) Pedagogy, Curriculum, Standards

Clarity Survey/Community Employer Surveys
a) 9/21
b) Brightbytes/Business Partner Surveys
c) Business Partners, K - 3 Instr., PK - 5 Integrationist, Dist. Technologist
d) Pedagogy, Curriculum, Standards, Community/Employer Partner Connections

Iowa 1:1 Institute
a) 4/21
b) Iowa 1:1 Presenters
c) K - 3 Instr., PK - 5 Integrationist
d) Pedagogy, Curriculum, Standards

Community Engagement

Sub-Section Points Awarded: / 10

How will the community be engaged?

The community will be engaged in the STEM initiative in the following ways:

1) Parent-Teacher Conference Nights - Families will be invited to visit the workspace before or after parent teacher conferences. Students will be encouraged to share how they have applied the computer science concepts they have learned. The workspace will also be a part of the Welcome to Kindergarten Night family tour.

2) Computer Science Showcases - Families, business partners, and other community members will be invited to special events where students can share projects that apply computer science concepts they have been working on throughout the year.

3) Math and Literacy Family Night - The Technology Instructor and Technology Integrationist will work with the Family Night committee to plan STEM activities for all students and parents to enjoy.

4) Dual Language Family Night - The Technology Instructor and Technology Integrationist will work with the Dual Language Family Night committee to plan STEM activities for all students and parents to enjoy.

5) Community Events - Community members and community/employer partners will be invited to the grand opening of the workspace and open house events.

6) Business Partnerships - Each K - 5 classroom is paired with a local business partner as part of the character education program. These business partners reflect a variety of fields, such as medicine, technology, finance, and engineering. Business partners visit their partner classes throughout the school year, and classes visit the business at least once a year. These partnerships help students understand the importance of good character in the workplace and increase career awareness. Business partners who specialize in computer science or STEM will be invited to the workspace to share with students the local career options that are available to them. This will help reinforce how computer science concepts that are taught at school have real-life applications in the workplace.

7) The local media (newspaper and radio) will have an open invitation to visit the computer science workspace. They will also be invited to showcases and other special events throughout the school year in order to increase community awareness of what happens in the workspace.

How will parents and a broader stakeholder group be involved in planning and implementation of the Computer Science is Elementary initiative?

The following stakeholders will be involved in the planning and implementation of this initiative: School Administration, Teachers, Parents/Families, School Board Members, and the larger community.

School Administration

The following school administrators will play a role in the planning and implementation of the computer science initiative: The District Superintendent, District Business Manager, District Technology Director, Denison Elementary Principal, Broadway Elementary Principal, and Director of Elementary School Improvement. During the planning and initial implementation, the administration will provide guidance on the vision, curriculum writing and revision, standards alignment, and implementation of the initiative. As the curriculum is revised over the next two years, the administration will ensure that the goals and vision are being met. Beyond the grant, the administration is willing to help sustain the equipment, curriculum, and future needs of the K - 3 workspace and the future updates at Broadway Elementary with funding from the regular school budget.

Teachers

All teachers will attend a presentation about the computer science initiative. This presentation will give an overview of the vision, rationale, layout, and curriculum for the new workspace. At this time, teachers who are interested in implementing computer science concepts in their classrooms will form the initial cohort group. A follow-up meeting during a future inservice day will give this cohort a more thorough overview of the computer science standards and what will be asked of each participant. Other PD sessions will be scheduled throughout the year to give these cohort teachers more time to explore ways to implement these standards and to experiment with the new equipment and resources. In Year 2 (or before for those teachers who are ready) the cohort group will be expanded to additional grade level team members. The ultimate goal will be to have all teachers in the building implementing computer science concepts in the core subject areas on a regular basis.

Parents/Families

Parents will be asked to complete electronic surveys on parent-teacher conference nights and/or through the school communication system Seesaw. Parents will be invited to share what computer science and employability skills they would like the curriculum and workspace to include. Parents who are part of the School Improvement Advisory Council (SIAC) will also have an opportunity to provide feedback on the initiative.

School Board Members

Members of the school board will be invited to tour the existing computer lab at its March 2019 meeting where the STEM initiative will be shared. Members will provide feedback on the proposed changes to the workspace, including the vision, layout, and curriculum. Members will receive monthly updates on the initiative from the administration, Technology Instructor, and Integrationist during the first two years of implementation. The goal of these updates is to encourage the board members and administration to find ways to sustain the initiative after the two years of the grant have passed.

Larger Community
Business partners complete a yearly survey to provide feedback on their partnership and the school's character education program. The Technology Instructor and Technology Integrationist will assist the counselors to expand the surveys to include questions regarding computer science and career awareness. The four partners listed in the next section will play a more formal role in shaping the vision, curriculum, and layout for the new workspace.

Who are or will be the community/employer partner(s) and what is the shared vision for engagement?
Four community/employer partners have agreed to participate in this initiative. Our shared vision is to create an environment that
1) Emphasizes computer science skills.
2) Promotes creativity, collaboration, critical thinking, and communication.
3) Increases awareness of technology-related careers.

The community/employer partners, their specialities, and specific roles in this initiative are listed below.

1) Bluespace Creative
Specialties: Brand management, website design, and graphic design
Specific roles in this initiative:
- Career awareness
- Branding and promotion
- Layout and interior design
- Naming the new computer science workspace
- Employment skills

2) PCS (Professional Computer Solutions)
Specialties: Information technology, public utility software design
Specific roles in this initiative:
- Career awareness
- Computer science curriculum
- Employment skills

3) WIT (Western Iowa Tech Community College)
Specialty: Upper education
Specific roles in this initiative:
- Career awareness
- Computer science curriculum

4) Mediacom Communications: Communication and information technology
Specialties: TV, Internet, phone, & home security services
Specific roles in this initiative
- Career awareness
- Computer science curriculum
- Employment skills

All applicants must have at least one community/business partner. Please include at least one signed letter of commitment (in PDF format) on employer letterhead from a community/business partner. Up to 10 employer letters may be added. This must be done in order for the application to be considered complete.

Four community/business partner letters of commitment are attached.

Budget

Points Awarded: / 20

20 points

Please include the amount and a brief explanation of the use of funds per cost category not to exceed $50,000 over two years. Allowable expenditures may include the following categories:

Budget Category	Total Request	Year 1	Explanation of Funds	Year 2
Professional Learning	$ 2,540.00	$ 1,770.00	send the Technology Teacher and the Technology Integrationist to the ITEC conference in the fall and the Iowa 1-1 Conference in the Spring. The funds will include paying for the registration fees to each conference and travel expenses associated with attending each conference. This amount also includes professional development for two Project Lead the	$ 770.00
Curriculum Development	$ 740.00	$ 500.00	will be used the first year to purchase curriculum materials and instructional books.	$ 240.00
Site Visits	$ 100.00	$ 50.00	will be used for travel expenses that would allow the K - 3 Technology Instructor, 4 - 5 Technology Instructor, PK - 5 Technology Integrationist, and the Technology Director to visit the Loess Hills	$ 50.00
District Costs	$ 46,053.00	$ 36,993.00	will be used to purchase 30 Chromebooks along with a charging cart, 2 Raspberry Pi kits with touch screen displays, and 5 flat panel display cart with 5 displays. The funds will also be used to purchase materials for coding and robotics (BeeBots, Dash and Dot, Sphero, Cubelets, and Cosmo) as well as subscriptions for Bloxels and Wixie. Supplies and participation fees for two Project Lead the	$ 9,060.00
Staffing Support	$ -	$ -	Our staff is currently in place, therefore we will not require any	$ -
Other	$ -	$ -		$ -
TOTAL:	$ 49,433.00	$ 39,313.00		$ 10,120.00

Cost Sharing (may include in-kind or cash from partners or other education funding streams)

Anticipated cost share over the two-year funding period.

33500

Year 1 anticipated cost share (in dollars). Please provide a brief explanation.

$26,750 will be used from District funds to pay for substitute teachers that will allow the Technology Instructor and Technology Integrationist time to write and align the curriculum once a quarter throughout the school year. Substitutes will also be needed for Professional Learning and Site visits. The Denison Community School District shares the same vision in moving forward to transition the traditional computer lab into more of a collaborative workspace. Therefore, they are committed to using District funds to purchase furniture that offers a more flexible workspace. The school would also like the Technology Instructor and Integrationist to act as Co-Project Managers. A portion of their salaries will be allocated for the time spent on managing the grant. The Co-Project Managers will be responsible for overseeing the transformation of the workspace and curriculum and making adjustments as needed throughout the year.

Year 2 anticipated cost share (in dollars). Please provide a brief explanation.

$6,750 will be used from District funds to pay for substitute teachers that will allow the Technology Instructor and Technology Integrationist time to write and align the curriculum once a quarter throughout the school year. Substitutes will also be needed for Professional Learning and Site visits. A portion of the Technology Instructor and Integrationist salaries will be again allocated for the time spent on managing the grant.

The expectation for the Computer Science is Elementary award is that the plan uses primarily existing school revenue sources to execute a plan. After year two of the award, what is the plan for sustainability using existing or any additional funding sources?

After year two of the award, the school district will provide the financial and human resources necessary to maintain the computer science initiative. The district is committed to sustaining the initiative in the following ways:

1) Continue the funding of the K - 3 Technology Instructor and PK-5 Technology Integrationist salaries.

2) Maintain and/or replace computer devices as they become unreliable or obsolete.

3) Renew the annual subscriptions for specific computer applications.

4) Continue the funding of the 4-5 Technology Instructor salary.

5) Redesign the 4-5 Technology curriculum and computer science workspace.

6) Continue the development of the Project Lead the Way initiative district-wide.

We will also explore opportunities to apply for additional grants.

Computer Science is Elementary Model Network

Points Awarded: **/ 10**

10 points

To be eligible for the award, participation in the Computer Science is Elementary Model Network is necessary. By checking this box, the district/system/stand-alone non-public school is willing to participate in a Computer Science is Elementary Model Network including, but not limited to, hosting visits and sharing best practices, challenges, opportunities and successes with colleagues across the state.

I agree

bluespace creative
imagination image impact

February 26, 2019

To Whom it May Concern:

bluespace creative is excited to partner with the Denison Elementary School to assist with their creation of an exciting and innovative K-3 computer science workspace.

Businesses need employees who are technologically literate. Moreover, we need creative workers who can communicate, collaborate, and think critically to solve problems. This partnership will help ensure that the workspace addresses these needs.

bluespace creative agrees to help Denison Elementary create the shared vision, curriculum (computer science and career awareness), layout and interior design, and the naming and promotion of the new space.

We look forward to this unique partnership and the possibilities that it will provide for the students both in school and beyond.

Thank you for your consideration.

Sincerely,

Scott Winey

Creative Director/Principal

bluespace creative, inc. · 1205 Broadway · Denison, Iowa 51442 · P 712 263 2211 · F 712 263 2213 · T 866 860 BLUE · www.bluespacecreative.com

Professional Computer Solutions LLC

3710 Timberline Drive / P.O. Box 70 / Denison, IA 51442-0070 / Ph 712.263.3106 / Fax 712.263.8145 / www.pcsco.com

February 22, 2019

To Whom it may concern:

Professional Computer Solutions, LLC (PCS) is excited to be a part of the Denison Elementary School Computer Lab updates. PCS has participated as a Business Partner with the Denison Community Schools for the past ten years.

PCS agrees to partner with the Denison Elementary School in order to help create a new K-3 computer science workspace that promotes students' communication, collaboration, creativity, and critical problem-solving skills. PCS will also provide input on the curriculum, specifically on computer science and employability skills.

This is a win-win for both the Denison Community School and PCS. Assisting children with the opportunity to grow and gain these skills at an early age will open their minds to all possibilities available to them in the future. It also cultivates a relationship with future employees of PCS.
Thank you for your consideration.

Sincerely,

Dana Ingerslev
Human Resource Director

WITT
Community College

Western Iowa Tech Community College
11 N 35th Street
Denison, IA 51442

To Whom It May Concern:

It is my pleasure to write a letter in support of the new Computer Science program for the Denison Community Elementary School. I feel this type of program is something that will be greatly utilized in our area and throughout our school district. Computer science and STEM activities are a viable part of the growth and education of young individuals preparing for continued education.

Speaking as a parent of five children who have been in the Denison Community School system STEM activities are essential and necessary to keep their minds engaged in the information they are learning. Any style of learning that the students can receive to improve their exposure to education and problem-solving skills is a plus for their growth and development

As the Director of the Denison campus I cannot speak enough about the importance of partnered curriculum with the education the students are receiving a young age and the essential preparation it enables them with for their college education needs. Western Iowa Tech Community College will agree to partner with the Denison Elementary School in order to help create a new K-3 computer science workspace that promotes students' communication, collaboration, creativity, and critical problem-solving skills. We will help to create a shared vision for the new workspace as well as be willing to provide input on the curriculum. We will be willing and able to provide input specifically on computer science and employability skills as well.

I believe this partnership, in addition to our current partnership with the Business Partner program, we will be able to assist in any needs that the Denison Elementary School would have in the creation of their new STEM area.

Sincerely,

Jessica Garcia

Jessica Garcia

Director of Denison Campus & Southern Service Area

Mediacom

February 28, 2019

To Whom It May Concern:

Mediacom is pleased to announce its partnership with the Denison Elementary School and its K-3 Computer Science initiative.

Mediacom's success as a company is tied to the availability of creative employees who can communicate, collaborate, and think critically to solve problems. These qualities are all goals of the Computer Science initiative at Denison Elementary.

As a community business partner, I welcome the opportunity to shape the vision, curriculum, and layout of the new workspace. The activities that will take place in this innovative and inspiring space will equip students with the skills they need to be productive citizens in today's technologically advanced society.

Mediacom looks forward to this unique partnership and the possibilities that will provide for the students both in school and beyond.

Thank you for your consideration.

Sincerely,

Eric Emery
Technical Operations Supervisor

Mediacom Communications Corporation
510 N Clark Street • Carroll, IA 51401• 712-220-1150 • www.mediacomcable.com

Reviewer Name:

Reviewer Signature: **Total Points Awarded:** **/100**